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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,035	06/20/2003	Werner Kleine	DT-6528	6367

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EXAMINER

GATES, ERIC ANDREW

ART UNIT	PAPER NUMBER
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3722

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/600,035	Applicant(s) KLEINE ET AL.	
	Examiner Eric A. Gates	Art Unit 3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/7/03</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the chunk of claim 17 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

Art Unit: 3722

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 1 is objected to because of the following informalities: In the last line of the claim, the reference character for "thickness" should be changed to "D". Appropriate correction is required. It should also be noted that references numbers and letters in parentheses in the claims do not hold patentable weight.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2-3, 5-6, and 12-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 3722

- a. Claim 2 recites the limitation "substantially same cross-sectional surface" in line 3. This limitation is unclear. For purposes of examination, it has been read as "substantially same cross-sectional surface area".
- b. Claim 3 recites the limitations "one of spherical and cylindrical axial stop surface" and "having, respectively, a shape of one of sphere and roll". This limitation is unclear. For purposes of examination, these have been read as "one of a spherical and cylindrical axial stop surface" and "having, respectively, one of a spherical and cylindrical shape."
- c. Claim 3 recites the limitation "the at least one groove" in line 2. There is insufficient antecedent basis for this limitation in the claim.
- d. Claim 5 recites the limitation "smooth surface sections which are one of smoothly pass into each other and form a sharp edge". This limitation is unclear. For purposes of examination, it has been read as "smooth surface sections exhibiting one of a smooth transition and a sharp edge transition".
- e. Claim 6 recites the limitation "functional surface-forming surface sections" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.
- f. Claim 12 recites the limitations "about 1.2-1.4 of the guide dimension" and "about .6-.8 of the guide dimension." These limitations render the claim indefinite because the actual limitation of the claim cannot be determined.
- g. Claim 13 recites the limitation "arranged with respect to each other one of parallel, crosswise, and at an acute angle". This limitation is unclear.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kleine (EP 0 304 002 A1).

9. Regarding claim 1, Kleine discloses a shank for a rotary and/or percussive tool, comprising at least two, axially spaced, guide regions 11; at least one radially projecting entrain strip 16; and at least one locking groove 18 arranged between the at least two guide regions 11 and axially closed at opposite end thereof for receiving at least one radially displaceable and axially displaceable, within predetermined limits, locking member 49 of chuck, wherein at least one of the at least two guide regions 11 has a guide dimension (not labeled, see Fig 1), and an axial region (not labeled, see Fig 1) of the locking groove 18 has a cross-sectional width (not labeled, see Fig 2) that includes a radial extent of the entrain strip 16, and a thickness (not labeled, see Fig 2) measure in a direction transverse to the width measurement direction, and wherein the guide dimension is greater than the thickness but smaller than the width.

10. Regarding claim 2, Kleine discloses the axial region of the locking groove 18 and at least one of the guide regions 11 have a substantially same cross-sectional surface within a tolerance range of +/- 10%, based on calculations taken from measurements of Figures 1 and 2.

Art Unit: 3722

11. Regarding claim 3, Kleine discloses that at least one of the opposite ends of the at least one locking groove 18 has one of a spherical and cylindrical axial stop surface 21 engageable by the locking member 49 having, respectively, one of a spherical and cylindrical shape.

12. Regarding claim 4, Kleine discloses a maximum aperture angle (not labeled, see Figure 2) of a bottom surface of the locking groove 18, which is defined by a cross-section of the axial region of the locking groove, amounts to at least 120 degrees, based on measurements of Figure 2.

13. Regarding claim 5, Kleine discloses a second, radially projecting, entrain strip 16 located diametrically opposite the at least one entrain strip, wherein a bottom surface of the at least one locking groove 18, which is located between the at least one and second entrain strips 16, forms a first functional surface (not labeled, see Figure 2) formed of smooth surface sections exhibiting one of a smooth transition and a sharp edge transition, with a transition region being curved in a direction to a tool axis.

14. Regarding claim 6, Kleine discloses that the functional surfaces have surface sections that are even.

15. Regarding claim 7, Kleine discloses a second locking groove 18 arranged diametrically opposite the at least one locking groove 18, with a bottom surface of the second groove, which is located between the at least one and second entrain strips, forming a second functional surface (not labeled, see Figure 2) located opposite the first functional surface.

Art Unit: 3722

16. Regarding claim 8, Kleine discloses the at least one guide region 11 has a cylindrical outer surface.

17. Regarding claim 9, Kleine discloses a second entrain strip 16, which is arranged diametrically opposite the at least one entrain strip 16, is provided in the axial region of the at least one locking groove 18.

18. Regarding claim 10, Kleine discloses a second locking groove 18 arranged diametrically opposite the at least one locking groove 18 and having a same shape.

19. Regarding claim 11, Kleine discloses a second entrain strip 16 arranged diametrically opposite the at least one entrain strip 16 in the axial region of the locking grooves 18.

20. Regarding claim 12, Kleine discloses that at the guide dimension of the guide region 11, the width is equal to about 1.2-1.4 of the guide dimension, and the thickness is equal to about 0.6-0.8 of the guide dimension, based on calculations taken from measurements of Figures 1 and 2.

21. Regarding claim 13, Kleine discloses further axial regions 12 axially spaced from each other and arranged with respect to each other one of parallel, crosswise, and at an acute angle (see Figure 2).

22. Regarding claim 14, Kleine discloses a third guide region 11 arranged between the axial regions.

23. Regarding claim 15, Kleine discloses a further, segment-shaped guide region (not labeled, see Figure 2) provided between the edge of the locking groove 18 and the peak of the entrain strip 16.

Art Unit: 3722

24. Regarding claim 16, Kleine discloses the invention according to the claim, as described above.

25. Regarding claim 17, Kleine discloses a chuck 40 for a tool according to the claim, as described above.

Conclusion

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Moser, Fehrle, Van Kijk, Rumpp, Gotzfried, Schroth, Reimann, Holzapfel, Bauman, and Peetz disclose tool shanks with features relating to the invention above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric A. Gates whose telephone number is 571-272-5498. The examiner can normally be reached on Monday-Thursday 7:45-5:15 & alt Fridays 7:45-4:15.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

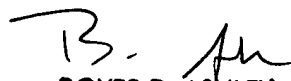
Art Unit: 3722

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



EAG
6 October 2005

Eric A. Gates
Patent Examiner
Art Unit 3722



BOYER D. ASHLEY
PRIMARY EXAMINER